during the professional football offseason[23]—were equal to or better than the Comcast-affiliated networks' worst quarters. Between the fourth quarter of 2006 and the fourth quarter of 2008, NFL Network had a low quarterly rating of 0.09, which occurred twice. By comparison, the Golf Channel had a low quarterly rating of 0.05 and Versus had a low quarterly rating of 0.09, which occurred three times. Despite their significantly weaker total-day ratings, Comcast carries both of its affiliated national sports networks—the Golf Channel and Versus—on its Expanded Basic tier while at the same time carrying NFL Network on its Premium Sports tier.

50. NFL Network is also significantly more popular during "prime time" than the Comcast-affiliated national sports networks. Prime time ratings are particularly important because they represent the average rating during peak television viewership—7 PM to 12 AM. Prime time is also important because, as the time of peak viewership, it is also the time when networks and MVPDs can command the highest advertising rates. As Table 3 indicates, NFL Network consistently commands prime time ratings that exceed those of its Comcast-affiliated rivals.

---

23. *See, e.g.*, NFL Network, Games on NFL Network, *available at*: http://www.nfl.com/nflnetwork/games (showing NFL Network-televised games between August 17, 2008 and December 20, 2008 for the 2008 NFL season).

TABLE 3: NIELSEN "PRIME TIME" RATINGS, 2006Q4 TO 2008Q4

		NFL Network	Golf Channel	Versus
2006	Q4*	0.64	0.11	0.17
2007	Q1	0.17	0.18	0.18
	Q2	0.11	0.14	0.24
	Q3	0.24	0.15	0.19
	Q4	0.58	0.09	0.19
2008	Q1	0.18	0.21	0.21
	Q2	0.11	0.14	0.34
	Q3	0.27	0.11	0.17
	Q4	0.58	0.08	0.22
Average		**0.31**	**0.13**	**0.21**

Source: *National People Meter – Household Live and Same-Day Coverage Rating*, NIELSEN (2009) (Nov. 2006 to Dec. 2008).
Notes: The averages are based on the average of each month's ratings.
* Denotes data for November through December 2006 because NFL Network ratings for October 2006 were not available.

As Table 3 demonstrates, NFL Network prime time ratings compare favorably to the ratings achieved by both the Golf Channel and Versus. NFL Network compares particularly favorably against the Golf Channel, as it was more than twice as popular as the Golf Channel (an average prime time rating of 0.31 versus Golf's 0.13) for the period from late 2006 to late 2008. NFL Network ratings also far exceed those of Versus (0.31 compared with Versus's 0.21). Similarly, the highest average quarterly prime time rating of NFL Network (0.64) far exceeds the highest corresponding rating for either Comcast-affiliated network (0.21 for the Golf Channel and 0.34 for Versus). These data, coupled with the analyses set forth in Section III.C. and Section IV, demonstrate that Comcast lacks any plausible efficiency justification for refusing to carry NFL Network on Comcast's Expanded Basic tier.[24]

24. As discussed in my analysis of other MVPD contracts in Section III.C. and Section IV, cost is no more plausible an efficiency justification than popularity.

2. There Is Substantial National Demand to View "Out-of-Market" NFL Games

51. The total-day and prime-time Nielsen ratings understate the enormous appeal of NFL Network's marquee programming—especially its eight regular-season NFL games—to a broad national audience. Specifically, Nielsen ratings for several television events carried on NFL Network since the inception of the eight-game package (in late 2006) reveal a broad nationwide interest in out-of-market NFL games that extends well beyond the DirecTV customers who subscribe to NFL Sunday Ticket.[25] A late-season Thursday-night game between the Dallas Cowboys and Green Bay Packers, for example, drew 10.1 million viewers on NFL Network.[26] The impressive audience for that game indicated that almost *one out of every four MVPD subscribers* who had access to NFL Network actually watched this game.[27] Media analysts pointed out that this estimate did not include: (1) the in-region Dallas and Wisconsin areas where the game was broadcast locally, and (2) the significant sports-bar viewing by those unable to watch the game at home.[28]

52. A review of the ratings for particular programs confirms the enormous popularity of NFL Network vis-à-vis Comcast-affiliated networks. Table 4 presents the 20 highest rated

25. The NFL Sunday Ticket is a package of live, Sunday afternoon out-of-market NFL games available exclusively to DirecTV customers. Comcast argued that most fans who would want to view NFL Network programming already have Sunday Ticket. *See* In the Matter of NFL Enterprises LLC v. Comcast Cable Communications LLC, File No. CSR-7876-P, Answer of Comcast Cable Communications, LLC, June 20, 2008, ¶ 53 ("Comcast's decision was further informed by its marketplace experience and its reasonable assumption that many hard-core NFL fans defected years ago to DirecTV as a result of the NFL Sunday Ticket package appearing exclusively on DirecTV."). Other MVPD carriage decisions and Nielsen ratings data reveal that this assumption is simply fallacious. *First*, many other MVPDs carry the NFL Network *and* the live eight-game package. This programming is different from the Sunday Ticket because it provides Thursday and Saturday night games rather than Sunday afternoon games. *Second*, Nielsen ratings data indicate that the NFL Network receives very high ratings, and thus there is substantial viewer interest—including interest among cable subscribers—in NFL Network programming. I address these issues in more detail at Section H, below.

26. Anthony Crupi, *ESPN Sports Another Cable Ratings Victory*, MEDIAWEEK, Dec. 4, 2007. ("On the individual program side, the under-distributed NFL Network whipped up a huge audience Thursday night with its preview of the NFC Championship Game, averaging 10.1 million viewers, or nearly a quarter of the channel's national footprint.").

27. *Id.*

28. *Id.*

NFL Network programs between late 2006 and the end of 2008. To provide a direct comparison of the nationwide appeal of NFL Network programming relative to programming carried by Comcast-affiliates Versus and the Golf Channel, Table 4 also presents the twenty highest rated programs shown on either the Golf Channel *or* the Versus network. Table 4 is generous to Comcast because it compares (a) the highest rated programs from January 1, *2003* to December 31, 2008 for *two* Comcast networks to (b) the highest rated programs from October 30, *2006* to December 31, 2008 for the sole NFL Network. Versus/OLN/Golf Channel data cover a substantially larger number of programs on more networks over a longer period, with a greater opportunity to carry more highly rated events.

TABLE 4: TWENTY HIGHEST RATED PROGRAMS ON NFL NETWORK, THE GOLF CHANNEL, AND OLN/VERSUS, 2003-2008*

Rank	Program	Date	Household Rating**
	NFL Network		
1	PACKERS VS. COWBOYS	11/29/2007	14.64
2	RAVENS VS. COWBOYS	12/20/2008	9.22
3	COWBOYS VS. FALCONS	12/16/2006	7.54
4	JETS VS. PATRIOTS	11/13/2008	7.49
5	COWBOYS VS. PANTHERS	12/22/2007	7.47
6	BRONCOS VS. CHIEFS	11/23/2006	6.84
7	BEARS VS. REDSKINS	12/6/2007	6.77
8	COLTS VS. JAGUARS	12/18/2008	6.58
9	PATRIOTS VS. GIANTS	12/29/2007	6.49
10	SAINTS VS. BEARS	12/11/2008	6.19
11	STEELERS VS. RAMS	12/20/2007	5.65
12	BENGALS VS. STEELERS	11/20/2008	5.57
13	BRONCOS VS. TEXANS	12/13/2007	5.49
14	VIKINGS VS. PACKERS	12/21/2006	5.36
15	GIANTS VS. REDSKINS	12/30/2006	5.31
16	CARDINALS VS. EAGLES	11/27/2008	5.3
17	RAVENS VS. BENGALS	11/30/2006	5.22
18	BRONCOS VS. BROWNS	11/6/2008	5.11
19	COLTS VS. FALCONS	11/22/2007	4.99
20	49ERS VS. SEAHAWKS	12/14/2006	4.86
	Golf Channel / OLN / Versus		
1	TOUR DE FRANCE	7/24/2005	2.08
2	NHL STANLEY CUP	5/26/2008	1.97
3	NHL STANLEY CUP	5/24/2008	1.81
4	NHL CONFERENCE FINALS	5/11/2008	1.77
5	PGA TOUR	2/24/2008	1.65
6	TOUR DE FRANCE	7/25/2004	1.63
7	TDF POST RACE	7/26/2003	1.58
8	NHL CONFERENCE FINALS	5/15/2008	1.54
9	TOUR DE FRANCE	7/26/2003	1.53
10	WORLD EXTREME CAGEFIGHTING	6/1/2008	1.53
11	SPRINT POST GAME	2/22/2008	1.44
12	PGA TOUR	2/22/2008	1.39
13	NHL CONFERENCE FINALS	5/13/2008	1.39
14	NHL CONFERENCE FINALS	5/9/2008	1.31
15	SPRINT PRE GAME	2/24/2008	1.3
16	TOUR DE FRANCE	7/17/2005	1.29
17	TOUR DE FRANCE	7/23/2005	1.27
18	PAC-10: OREGON VS. OREGON ST.	11/29/2008	1.26
19	PGA TOUR	2/23/2007	1.25
20	PGA TOUR	5/5/2007	1.25

Source: *Galaxy Explorer* (minimum 25 minute show ratings), NIELSEN (2009).
* Household Coverage Rating
** 1/1/03 to 12/31/08 for Golf Channel and for OLN/Versus; 10/30/06 to 12/31/08 for NFL Network.

As Table 4 indicates, NFL Network provides programming that is of significantly greater interest to the public than does either Versus or the Golf Channel. The discrepancy is so wide that *the top-ranked Versus or Golf Channel program would not even rank among the top twenty NFL Network programs.* Rather, the top-ranked Comcast-affiliated program of the past six-plus years would rank as the 35th-highest ranked program if it had been shown on NFL Network.[29] Furthermore, 25 NFL Network programs other than live NFL games—such as pre- and post-game shows and the Rutgers vs. Kansas State college football game—received higher ratings than at least one of the Comcast-affiliated programs listed in Table 4 (that is, a rating above 1.25). Non-game programming on NFL Network, such as the Draft and the Combine, are also popular; for example, NFL Network coverage of Day 1 of the NFL Draft received an average rating of 0.86 over the six-and-one-half hour program.[30]

53. Nielsen ratings data can also be used to examine the relative popularity of NFL regular-season games in "in-market" and "out-of-market" NFL cities. This analysis is a test of whether there is sufficient interest in live NFL programming in "out-of-market" locales; if there is substantial interest in such programming, then an MVPD may find it attractive to carry NFL Network outside of the competing teams' home market(s). The most appropriate measures of in-market and out-of-market interest are the Nielsen ratings for NBC's Sunday Night Football and ESPN's Monday Night Football games, which (unlike the Sunday afternoon games) are shown nationwide during prime time. Table 5, below, provides the average in-market and average out-of-market Nielsen ratings for these two game packages.[31]

---

29. *Galaxy Explorer* (minimum 25 minute show ratings), NIELSEN (2009). The Tour de France programming on OLN/Versus would rank between the NFL Network's #34 (the post-game show following the Indianapolis-Jacksonville game on Dec. 18, 2008, which garnered 2.11 coverage rating) and the present #35 (the post-game show following the New Orleans-Chicago game on Dec. 11, 2008, which attracted a 2.07 coverage rating).

30. *Id.*

31. This analysis is based on a total of 30 DMAs with NFL teams. For more information, *see* the note associated with Table 5 and Appendix 3.

TABLE 5: AVERAGE IN-MARKET AND OUT-OF-MARKET RATINGS FOR NATIONALLY TELEVISED PRIME TIME REGULAR-SEASON NFL GAMES, 2008 NFL REGULAR SEASON

NFL Week	ESPN Monday Night Football		NBC Sunday Night Football	
	In-Market	Out-of-Market	In-Market	Out-of-Market
1	40.2	8.9	19.3	9.8
1	*	*	35.7	12.5
2	26.0	6.9	**	11.5
3	39.9	13.0	39.3	13.8
4	20.0	8.8	30.2	11.2
5	41.5	8.8	38.6	10.1
6	40.6	8.0	26.3	8.9
7	23.0	8.4	18.3	7.1
8	23.8	7.8	40.1	11.9
9	40.0	8.5	*	*
10	43.2	9.3	24.8	11.4
11	18.9	8.5	35.9	13.1
12	37.4	8.3	36.1	10.6
13	38.7	8.3	32.3	10.0
14	22.5	6.9	32.4	8.8
15	31.5	8.3	29.0	14.6
16	26.2	7.2	29.3	12.3
17	36.3	9.1	34.0	10.1
Season Average	32.3	8.5	31.3	11.1

Source: *Overnight DMA Household Ratings*, NIELSEN (2009) (2008 NFL Regular Season).
Notes: The "in-market" rating represents the average rating (ESPN plus broadcast for Monday Night Football, NBC broadcast for Sunday Night Football) for the DMA(s) of the two competing teams. The "out-of-market" rating is the average rating (ESPN for Monday Night Football, NBC broadcast for Sunday Night Football) of the other DMAs with an NFL team.
* ESPN televised one game in Week 1; NBC televised two games in Week 1 but zero games in Week 9.
** Ratings not available for either home city due to Hurricane Gustav/Ike.[32]

As Table 5 indicates, NFL regular-season games are very popular outside of the "home" markets of the competing teams.[33] The average in-market ratings (32.3 and 31.3) demonstrate the enormous appeal of NFL teams in their home markets. However, the out-of-market ratings are also substantial. For example, the season average rating for NBC Sunday Night Football (11.1) is

32. Note that select ratings in out-of-market cities are also omitted by Nielsen in some weeks.

33. Note that this analysis includes NFL cities only. Thus, for example, the Week 1 ESPN Monday Night Football game between the Green Bay Packers and the Minnesota Vikings received an average rating of 40.2 in the Milwaukee and Minneapolis-Saint Paul markets and an average rating of 8.9 in all other NFL markets (for example, New York, Chicago, Philadelphia). Note that Milwaukee is considered an NFL market due to its proximity to Green Bay.

equivalent to the fourth-highest rated broadcast program shown during the entire week of February 9, 2009.[34] Out-of-market NFL game ratings also far exceed the ratings garnered by *any* contemporaneous programming carried on Versus or the Golf Channel.[35]

54. Given the national distribution sought by national sports networks (including NFL Network, Golf Channel, and Versus), the popularity of sports programming outside of any of a sports league's home cities is an important consideration for MVPDs. Networks that provide sports programming with wide appeal in many markets have substantially greater value to a national MVPD than do networks whose appeal is more limited. Table 6 reports the league-city and non-league-city average broadcast ratings for the NHL and the NFL in 2007 and 2008.

34. *See* Nielsen Media Research, Top TV Ratings, on file with author, *available at:* http://www.nielsenmedia.com/nc/portal/site/Public/menuitem.43afce2fac27e890311ba0a347a062a0/?vgnextoid=9e4df9669fa14010VgnVCM100000880a260aRCRD (accessed Feb. 18, 2009).

35. *See* Table 4, which shows that the highest-rated Comcast-affiliated national sports program in 2008 was the Stanley Cup Finals (a rating of 1.97).

TABLE 6: NIELSEN BROADCAST RATINGS COMPARING CITIES WITH AND WITHOUT LEAGUE TEAMS

	Average Rating		Ratio
	League Cities	Non-League Cities	(Non-League Rating as a Percentage of League Rating)
2007			
NFL			
Regular Season	14.3	10.5	73
Post-Season	23.1	20.4	88
Championship (Super Bowl)	46.5	43.9	94
NHL			
Regular Season	1.5	0.9	60
Post-Season	1.9	1.0	53
Championship (Stanley Cup)	2.5	1.7	68
2008			
NFL			
Regular Season	13.8	10.3	75
Post-Season	21.0	18.4	88
Championship (Super Bowl)	43.9	42.4	97
NHL			
Regular Season	1.7	0.9	59
Post-Season	1.9	0.9	47
Championship (Stanley Cup)	5.9	2.4	41

Source: Arianna – Household Data, NIELSEN (2009).
Notes: See Appendix 3 for a list of NFL and NHL "league" cities.

Table 6 demonstrates the enormous popularity of live NFL regular-season games, including in markets without NFL teams. NFL regular-season games aired in non-NFL cities attracted approximately 75 percent of the ratings that those games attracted in NFL cities. Post-season NFL games were even more popular in non-NFL cities, garnering between 88 and 97 percent of the ratings in NFL cities. The NHL is less popular than the NFL by every measure. NHL programming receives significantly lower absolute broadcast ratings in its home cities and in non-league cities. And the gap between NHL-city viewership and non-NHL city viewership is significantly greater than the equivalent gap for the NFL.[36]

C. Comcast's Exclusionary Conduct Cannot Be Justified Based on Competitive Cost Concerns Vis-à-vis Its In-Region MVPD Rivals

55. As I demonstrated above using the Nielsen ratings, Comcast's discriminatory conduct lacks any efficiency justification related to popularity: NFL Network is more popular than Comcast's affiliated sports networks. Yet Comcast suggests that carrying NFL Network on its Expanded Basic tier would increase its Expanded Basic rate, which would make it less competitive vis-à-vis in-region MVPD rivals such as DirecTV and Dish Network. This claim is undermined by the fact that Comcast did *not* reduce its D2 tier price when it removed NFL Network from its D2 tier.[37] Moreover, as Table 7 shows, NFL Network is carried by several of Comcast's largest in-region rivals on highly penetrated tiers.[38]

---

36. That is, non-NHL city viewership is only 41 to 68 percent of viewership in NHL league cities whereas non-NFL city viewership is a much stronger 73 to 97 percent of that in NFL league cities.

37.

38. NFL Network is carried by over 200 MVPDs on highly penetrated tiers.

TABLE 7: NFL NETWORK CARRIAGE BY SEVERAL OF COMCAST'S IN-REGION MVPD RIVALS

Rival In-Region MVPD	Tier	Percent Subscribers (lower bound)
Verizon	FIOS TV Premier (Expanded Digital-Not part of Sports Tier)	
DirecTV	DirectTV Select Choice Package (Same Tier as ESPN)	
Dish Network	America's Top 100+ Expanded Basic	
AT&T	U200 Tier	

Source: These data are based on the most recently available internal NFL subscriber counts (July 31, 2008) and on the total subscriber counts provided by the firms in government filings. *See* Comcast Corp., SEC Form 10-Q (filed Oct. 29, 2008), at 23; DirecTV Group Inc., SEC Form 10-Q (filed Nov. 6, 2008), at 32; Dish Network, SEC Form 10-Q (filed Nov. 9, 2007), at 425; Verizon Communications Inc., SEC Form 10-Q (filed Oct. 28, 2008), at 19.
Note:

Table 7 demonstrates that Comcast would not be disadvantaged vis-à-vis its in-region MVPD rivals if it carried NFL Network on its Expanded Basic tier. Any inflationary pressure caused by carriage of NFL Network programming on the Expanded Basic tier would be felt at least symmetrically by Comcast's in-region rivals.[39]

D. The Economic Analysis of Exclusionary Conduct

56. A vertically integrated cable operator that discriminates against an unaffiliated national sports programming network—and thereby excludes a rival from its highly penetrated tiers—acts anticompetitively to the extent that such activity leads to a reduction in consumer welfare. That is, anticompetitive discrimination is: (1) conduct that harms a rival and (2) conduct that, by harming a rival, also harms consumers. The relevant consumers here are viewers and advertisers. By refusing to carry a rival national sports programming network on its highly penetrated tiers, a vertically integrated cable operator may (1) deny upstream rival programmers

39. The fact that some of Comcast's out-of-region rivals, such as Time Warner, may also engage in discriminatory conduct towards the NFL Network is not as relevant, as Comcast's price is primarily determined by the price of its in-region rivals.

access to the most efficient means of selling advertising and providing content to viewers and/or (2) prevent upstream programming rivals from achieving critical economies of scale. Both outcomes have the effect of raising a rival's costs. If rival sports programmers cannot impose the same degree of price-disciplining behavior on advertising prices or programming prices (vis-à-vis affiliated networks) as they would in the absence of the exclusionary conduct, those prices will rise, decreasing consumer welfare.[40]

57. By refusing or conditioning a programmer's access to its highly penetrated tiers, Comcast may impair the competitiveness of unaffiliated sports networks such as NFL Network in two ways. First, such conduct deprives rival sports networks of critical economies of scale.[41] Exclusionary conduct imposes barriers to entry and expansion that make rivals smaller, causing them to be less efficient when markets exhibit economies of scale, scope, research, or when markets display network effects.[42] Excluded from highly penetrated tiers, an unaffiliated programmer such as NFL Network cannot compete for viewers on equal terms with Comcast's affiliated sports programming. Viewers who wish to view NFL Network must incur higher costs due to the position of NFL Network on a premium channel tier. Because demand for any program is a decreasing function of its price, fewer subscribers will be exposed to NFL Network as a result of Comcast's discriminatory conduct. NFL Network would operate at a more efficient scale but for Comcast's discrimination because NFL Network's average cost per viewer declines as the number of viewers increases. If such exclusion prevents a rival from covering its fixed

---

40. From an economic perspective, a firm with significant market power engages in anticompetitive behavior where no inefficiency would result from dealing with a rival and where denying access to rivals enhances monopoly power. *See* Einer R. Elhauge, *Defining Better Monopolization Standards*, 56 STANFORD L. REV. 253, 295–98, 305–14 (2003). Discriminatory treatment of rivals is much more anticompetitive because it cannot be justified by any effect on incentives to invest and it is less likely to be justifiable in terms of production efficiencies. *Id.*

41. *See, e.g.*, ROBERT H. BORK, THE ANTITRUST PARADOX 372-373 (Free Press 1978); *Tying, Foreclosure and Exclusion, supra*, at 837-60; *A General Analysis of Exclusionary Conduct, supra*, at 659.

42. *See Anticompetitive Exclusion, supra. See also Defining Better Monopolization Standards, supra.*

costs in the long run, it will be forced to exit ("complete foreclosure"). And even if such exclusion allows the rival to cover its fixed costs but does so at an artificially smaller scale ("partial foreclosure"), the rival cannot price efficiently.[43]

58. Second, Comcast's exclusionary conduct deprives rival programmers of the most efficient means of obtaining subscribers and advertisers. This is true even if rival sports networks are not deprived of economies of scale.[44] This harm is caused by depriving Comcast's programming rivals of the most efficient means of selling advertising and programming, and thereby forcing them to use less efficient alternatives. Such conduct deprives rivals of market share, as described above, and also causes harm by raising their costs even if they achieve the required market share needed to exploit such economies. As a result, rival programmers are weakened competitors in all aspects of the programming industry, including in their ability to acquire programming from content owners.

59. By favoring its affiliated national sports networks, Comcast decreases the profitability of rival networks. Operating and sales costs are increased as rival firms shift to higher cost suppliers or less efficient distribution channels.[45] In this case, NFL Network's selling costs would be expected to be higher because, to achieve the same level of penetration, it must invest in greater promotional activity to induce Comcast subscribers to select the more expensive

---

43. That is, the rival will be forced to produce at a level that corresponds to the more elastic portion of its demand, where a price reduction (and output expansion) would otherwise increase its profits. In its recent section 2 report, the Department of Justice recognizes that such conduct can impair a rival's ability to compete effectively, even if the rival is not driven from the market and even if marginal costs are not raised. Department of Justice, Competition and Monopoly: Single-Firm Conduct under Section 2 of the Sherman Act, Sept. 2008, at Chapter 8 ("In particular, exclusive dealing may be harmful when it deprives rivals 'of the necessary scale to achieve efficiencies, even though, absent the exclusivity,' more than one firm 'would . . . be large enough to achieve efficiency.' In other words, exclusive dealing can be a way that a firm acquires or maintains monopoly power by impairing the ability of rivals to grow into effective competitors that erode the firm's position. As one panelist put it, 'the exclusive dealing case that you ought to worry about' is where exclusivity deprives rivals of the ability to obtain economies of scale.") (citations omitted).

44. *See, e.g. Anticompetitive Exclusion, supra*, at 234-45.

45. *Id.* at 234 ("Competitors of the purchaser experience a cost increase as they necessarily shift to higher cost suppliers or less efficient inputs.").

premium tier. NFL Network did indeed incur greater costs when it set out on a grassroots campaign to retain broader customer exposure.[46] Alternatively, NFL Network could explicitly subsidize viewers' cost to see NFL Network on a premium tier. Either of these responses would raise NFL Network's incremental selling costs, thereby making it a weaker competitor. Moreover, for each viewer lost due to Comcast's discriminatory conduct, NFL Network loses advertising revenues that serve to defray NFL Network's costs. Thus, causing NFL Network to lose incremental advertising revenues (by placing NFL Network on an inferior tier) is tantamount to raising NFL Network's costs.[47] Comcast benefits from its discriminatory conduct because Comcast-affiliated sports programmers, such as Versus, Golf Channel, and SportsNet, face a weakened and higher-cost competitor that is less able to restrain Comcast's pricing power in programming and related advertising.[48] Comcast can therefore raise its prices above the levels that it could charge if not for the exclusionary conduct, thus harming viewers and advertisers.

60. It bears emphasis that Comcast need not drive NFL Network from the market for its exclusionary conduct to be profitable. It is always better to compete against a higher-cost or less-efficient rival. Higher-cost firms reduce output compared to lower-cost firms,[49] which may allow the lower-cost firm (here, Comcast) to raise prices or increase market share. Additionally,

46.

47. According to a General Accounting Office report, cable networks received nearly half of their revenue from advertising in 2002. *See* U.S. General Accounting Office, Statement of Mark L. Goldstein, Director, Before the U.S. Senate Committee on Commerce, Science, and Transportation, Subscriber Rates and Competition in the Cable Television Industry, Mar. 25, 2004, at 14.

48. Comcast SportsNet networks are regional sports networks that operate in many major Comcast markets, such as Washington, D.C. (which is served by Comcast SportsNet Mid-Atlantic). *See* Table 1.

49. *Anticompetitive Exclusion, supra*, at 247 ("Even if the purchaser succeeds only in raising its rivals' costs (and does not also gain power to raise price), it still may deprive society of another benefit promised by free markets, minimization of the costs of producing output. This benefit, often termed "production efficiency," is realized when each firm minimizes its own costs of production and when all firms produce output commensurate with their relative costs (i.e., when lower cost firms produce more output). Simply raising some rivals' costs, without conferring power over price, can reduce production efficiency if, as a consequence, excluded rivals reduce output leaving slack that can only be taken up by higher cost competitors.").

raising a rival's cost does not require a firm to sacrifice short-term profits.[50] Thus, it is incorrect to analyze Comcast's exclusionary behavior on the premise that Comcast must sacrifice profits in the short term to entirely drive its rivals from the market. No such sacrifice is needed here. Indeed, Comcast perversely gains *gross* incremental revenues of approximately $7 per month for every customer who subscribes to the premium sports tier through its discriminatory conduct, as subscribers with a strong preference for NFL Network are forced to pay higher monthly subscription rates to Comcast.

61. The theory of vertical foreclosure presented above is illustrated by a recent case study of discrimination involving apparent discrimination by a vertically integrated cable operator against an unaffiliated sports network. In North Carolina, Time Warner Cable decided to place the unaffiliated regional sports network C-SET on a narrowly penetrated premium digital tier.[51] C-SET was anchored by sports game programming for the NBA's Charlotte Bobcats.[52] Citing lower than expected audience and advertising numbers, C-SET has since shut down[53] and its sports programming rights (including the Bobcats rights) have been sold to Time

---

50. *Id.* at 224 ("Raising rivals' costs can be a particularly effective method of anticompetitive exclusion. This strategy need not entail sacrificing one's own profits in the short run; it need not require classical market power as a prerequisite for its success; and it may give the excluding firm various options in exercising its acquired market power.").

51. Kurt Badenhausen, *Full-Court Press; Robert Johnson spent $300 million to create the Charlotte Bobcats, only to struggle with tepid attendance, indifferent sponsors and poor play. But his big bet now may be starting to pay off,* FORBES, Jan. 9, 2006 [hereinafter *Full Court Press*], at 128 ("The rocky season hit a low point last June when the team had to shut down its regional sports channel, C-SET. Time Warner had insisted that C-SET be carried as a premium digital service instead of Expanded Basic cable, which reduced its reach to only 600,000 homes, less than half the market."). Andrew Shain, et. al, *Bobcats Shut Off Their TV Network; Citing Lack of Viewers, Team Pulls Plug on C-SET after a Year,* CHARLOTTE OBSERVER, Jun. 29, 2005, 1C ("C-SET debuted on Time Warner digital cable systems in the Carolinas in October. Digital cable attracts about 40 percent of subscribers and costs $15 more a month than more-popular standard cable in Charlotte.").

52. Rick Bonnell, *Network to Feature Bobcats, Region Teams; New TV Outlet will be only on Digital Cable,* CHARLOTTE OBSERVER (NC), Mar. 11, 2004, 1C.

53. *Id.* ("Failing to meet its audience and advertising goals, the Charlotte Bobcats will pull the plug on their regional sports network Thursday after a less than a year.").

Warner Cable.[54] Time Warner Cable now shows the Bobcats programming on an affiliated network carried on its Expanded Basic tier.[55]

E. The Theory of Exclusionary Conduct Applies to Comcast and the Sports Programming Industry

62. In this section, I apply the economic framework developed above to this case. There is anticompetitive harm here because (1) scale economies exist in the production of national sports programming and the associated sale of advertising during that programming and (2) highly penetrated tiers are the most efficient distribution channels for engaging in those two activities.

1. There Are Large Economies of Scale in the Production of National Sports Programming and the Associated Sale of Advertising During that Programming

63. Sports programming exhibits large economies of scale. After the sports programmer acquires the distribution rights to live sporting events (a large sunk cost), the cost of supplying that content to one subscriber is nearly the same as the cost of supplying that content to one million subscribers. Stated differently, the incremental cost to a network of supplying sports programming to additional viewers is close to zero. Other significant costs in supplying sports programming, including hiring crews and purchasing cameras and other equipment, are properly characterized as fixed costs. Accordingly, there are large economies of scale in the production of sports programming—that is, the average cost of supplying programming declines as the number of subscribers increases.

---

54. Jefferson George & Rick Bonnell, *Deals Widen Bobcats' TV reach*, CHARLOTTE OBSERVER, Apr. 9, 2008, D1.

55. *Id. See also Full Court Press, supra* ("The team has a new cable TV deal with Time Warner, which allows it to reach 1.4 million subscribers and brings in an estimated $8 million a year.").

64. There are also large economies of scale in the sale of national advertising by national programming networks such as NFL Network.[56] A review of the economic literature suggests that the scale economies associated with national television advertising are significant. Advertisers can receive better returns by advertising with larger audiences, and as a result, advertising rates generally increase with audience size.[57] For example, Comcast indicates that it enjoys economies of scale in the sale of advertising. As a result of a recent merger of its Versus and Golf Channel ad sales staffs, Comcast Sports Sales has extended its reach by selling ads seen by more viewers.[58] Comcast advertising sales President David Cassaro recently noted that this strategy "has yielded more sales."[59]

65. Thus, by excluding NFL Network from its Expanded Basic tier, Comcast can prevent a programming rival from enjoying scale economies, thereby causing the rival to operate at higher costs. Comcast's decision to relegate NFL Network to a premium sports tier, thereby reducing the availability of NFL Network to Comcast subscribers from 8.6 million to 1.4 million, prevented NFL Network from exploiting the significant economies of scale in advertising and

---

56. At least one study suggests that national advertising is a separate product market from local advertising. A large price disparity exists between local and national advertising rates, suggesting that a collection of local advertising slots is not a close substitute to a national advertisement. *See* Michael Porter, *Interbrand Choice, Media Mix and Market Performance*, 66 AM. ECON. REV. 398, 403 (1976). Duplicating the reach of a national advertising slot by purchasing local advertisements has been shown to be as much as 10 times more expensive. Even at the low end of the pricing disparity, advertisers still receive a 30 percent discount by using a national advertising scheme over multiple lower cost advertisements. *Id.*

57. *See, e.g.*, Johan Arndt & Julian L. Simon, *Advertising and Economics of Scale: Critical Comments on the Evidence*, 32 J. IND. ECON. 229, 231-2 (1983); Dong Chen & David Waterman, Vertical Foreclosure in the U.S. Cable Television Market: An Empirical Study of Program Network Carriage and Positioning, Oct. 2005, at 7. Advertisers may also consider factors such as the season and time of day. But these factors are not affected by Comcast's tiering decision.

58. Jon Show & John Ourand, *Comcast Combines Versus, Golf Channel Sales Efforts*, STREET & SMITH'S SPORTS BUSINESS JOURNAL, Jan. 26, 2009, page 03 ("Comcast is combining the national sales teams of Versus and Golf Channel under the Comcast Sports Sales banner, which will be led by advertising sales president David Cassaro...Golf Channel, which is in 82 million homes, was the last Comcast sports network with an independent sales team. Versus is in 74 million homes. Cassaro said there were companies that already advertise across both networks [Versus and the Golf Channel], and that the multiplatform offering 'has yielded more sales,' though he wouldn't name names.").

59. *Id.*

programming described above.[60] As a result, NFL Network is forced to operate at a level that corresponds to the more elastic portion of its demand curve, where a decrease in price (and a corresponding increase in output) would otherwise increase its profits. Accordingly, NFL Network cannot impose the same degree of price discipline in the relevant programming and advertising markets as it could absent the exclusionary conduct.

2. The Expanded Basic Tier of a Cable Operator's Network Is the Most Efficient Distribution Channel in the Production of National Sports Programming and the Associated Sale of Advertising During Sports Programming

66. The social benefits (efficiencies) of aggregating disparate programs on the Expanded Basic tier are well known.[61] There are also substantial private benefits to networks associated with carriage on the Expanded Basic tier. Carriage on the Expanded Basic tier grants a programmer access to a substantial majority of an MVPD's subscribers, making it the most efficient distribution channel available to most networks.[62] In contrast, carriage on less broadly penetrated tiers grants a programmer access only to a smaller subset of an MVPD's subscribers (meaning that the D2 tier is less efficient than the Expanded Basic tier and that the the premium sports tier is even less efficient).

67. After a network has been relegated to a premium tier, its subscribership plummets. Although it may be possible to reclaim a certain percentage of former subscribers who have a strong preference for the programming, a confluence of factors ensures that the conversion—that is, the incremental promotional efforts—will be costly. And it is precisely this

60. Declaration of Frank Hawkins, May 2, 2008 [hereinafter *Hawkins Declaration*], ¶ 18 ("Although the NFL Network was originally available to about 8.6 million subscribers on the digital basic tier, it became available to only 1.4 million Comcast household subscribers to the premium sports tier after the drop.").

61. *See, e.g.*, Thomas Hazlett, Shedding Tiers For A La Carte? An Economic Analysis Of Cable TV Pricing, George Mason University School Of Law Working Paper (2006) (explaining that bundling is highly efficient because it reduces transaction costs and prices marginal viewing choices exactly at their marginal cost—namely, zero).

62. The Basic or "lifeline" tier, although it may be more efficient, is not available to most networks.

incremental selling cost (with no offsetting benefit) that makes the Expanded Basic tier the most efficient distribution channel for a network. *First*, the distributor controls the surcharge that the subscriber faces if he or she wants to maintain the displaced programming. In this case, Comcast charges its subscribers at least an additional $7 per month to view NFL Network, which is a significant penalty in relation to the Expanded Basic monthly subscription fee. *Second*, even if some viewers would be willing to pay more than $7 per month to view NFL Network (along with the other channels on the same premium tier), many viewers will not be aware of the existence of NFL Network or the nature of the programming available on NFL Network. NFL Network is an "experience good"—it is impossible to gain that experience if the network is available only on the premium tier.[63] For these reasons, the incremental promotional efforts needed to reclaim lost subscribers due to Comcast's conduct are economically significant. If NFL Network were to try to reclaim such subscribers, it would have to educate them on the nature of its content (without their being able to sample it) and then convince them that said content is worth spending at least $7 more per month. Although NFL Network has been somewhat successful in these efforts—as of November 2008, [redacted] of Comcast subscribers (or [redacted]) had added the sports tier since Comcast moved NFL Network to that tier[64]—Comcast reaps an outsized gain from NFL Network's costly efforts to overcome

63. The idea of "experience goods" dates back to a 1970 paper showing that it was more difficult to determine utility associated with quality than with price and that certain goods must be used before a determination on utility can be determined. *See* Philip Nelson, *Information and Consumer Behavior*, 78 J. POL. ECON. 311 (1970). Since then, experience goods have been formalized to be goods for which consumers do not know their preferences before consumption. This concept has been applied to a variety of industries, most notably retail goods including electronics, appliances, clothing, food, and toys. *See* Yeon-Koo Che, *Customer Return Policies for Experience Goods*, 44 J. IND. ECON. 17, 18 (1996); Douglas Gale & Robert Rosenthal, *Price and Quality Cycles for Experience Goods*, 25 RAND J. ECON. 590 (1994); Carl Shapiro, *Optimal Pricing of Experience Goods*, 14 BELL J. ECON., 497 (1983).

64. When Comcast first moved the NFL Network to its Premium Sports Tier, only 1.4 million subscribers viewed the NFL Network. In November 2008 there were approximately [redacted] Comcast subscribers to the NFL Network, implying an increase of [redacted]. [redacted]

Comcast's discrimination. Because the Expanded Basic tier affords a programmer access to the distributor's subscribers at no incremental selling expense, the Expanded Basic tier is the most efficient distribution channel for distributing programming and for selling advertising.

68. In addition to the incremental selling expenses associated with movement from a highly penetrated tier (Expanded Basic or Digital) to a premium tier, a programmer loses the advertising revenues associated with former subscribers on a broadly penetrated tier. As explained above, advertising revenues serve to defray the incremental variable costs of running a cable network. Thus, depriving a rival of incremental advertising revenues via an adverse carriage decision has the same economic effect as raising a rival's costs.

69. Indeed, Comcast itself recognizes the value of gaining access to a distributor's Expanded Basic tier. According to the Dish Network, Comcast blacked out NHL games on Comcast's Outdoor Life Network (OLN, now known as Versus) when Dish refused to capitulate to Comcast's 40 percent subscriber-penetration demands—that is, Comcast demanded that Dish Network carry OLN on a tier to which at least 40 percent of Dish's customers subscribed.[65] Comcast took the position in 2005 that national sports programming should *not* be relegated to poorly penetrated tiers. A spokesperson for OLN promoted the network's hockey programming by stating that "[h]ockey is a major sport that deserves to be seen as other major sports are on a broadly distributed tier."[66] This is even more true for NFL football because NFL football is far more popular than NHL hockey. It is noteworthy that although Comcast demanded a 40 percent

---

See Hawkins Declaration, supra, ¶ 18. *See also NFL Subscriber Report by MSO* (Top 10 MSOs), NFL NETWORK (2009).

65. *See* Echostar Comments, Dec. 23, 2005, at 3-5.

66. *EchoStar pulls OLN after failing to show NHL games*, ASSOCIATED PRESS, Oct. 20, 2005.

penetration rate for Versus, and although football is far more of a "major sport" than hockey, Comcast itself *never* carried NFL Network at a 40 percent or greater penetration rate.[67]

F. The Resulting Harm to Enterprises

70. As the largest MVPD in the nation, Comcast's foreclosure of NFL Network from Comcast's broadly penetrated tiers (including both Expanded Basic and D2) is presumptively anticompetitive even under a traditional share-based approach to analyzing foreclosure.[68] A potentially relevant geographic market for analyzing Comcast's conduct is the nation, as NFL Network may sell its programming to MVPDs across the country. Comcast controlled 22 percent of all nationwide MVPD subscribers in June 2006.[69] Comcast controls a significantly greater share of national MVPD subscribers than does the next largest MVPD, DirecTV.[70] To the extent that the relevant geographic markets consist of only those areas with an interest in NFL games—in particular, the DMAs associated with the 32 local NFL franchises—the share of the market that Comcast forecloses through its carriage decision may be even higher than 22 percent. To use one example of a DMA with a professional football franchise (the Philadelphia Eagles), as of 2005, Comcast controlled almost 60 percent of all television households (and a larger share of MVPD households) in the Philadelphia DMA.[71] In this section, I identify specific harm to NFL Network caused by Comcast's exclusionary conduct.

---

67. *See NFL Subscriber Report by MSO* (Top 10 MSOs), NFL NETWORK (2009).

68. *See* PHILLIP AREEDA, IX ANTITRUST LAW 375, 377, 387 (Aspen 1991) (indicating that 20 percent foreclosure is presumptively anticompetitive); *See also* HERBERT HOVENKAMP, XI ANTITRUST LAW 152, 160 (indicating that 20 percent foreclosure and an HHI of 1800 is presumptively anticompetitive).

69. In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Thirteenth Annual Report, MB Dkt. No. 06-189, released Jan. 16, 2009, at 146 Table B-3.

70. *Id.* (showing DirecTV with a 16 percent share of national MVPD subscribers).

71. *See, e.g.*, In the Matter of Applications for Consent to the Assignment and/or Transfer of Control of Licenses, MB Dkt. No. 05-192, Memorandum Opinion and Order, released July 21, 2006 [hereinafter *Adelphia Order*], at *54 fn. 400 ("Specifically, Comcast asserts that there would be no significant change in concentration within the footprints of CSN West and CSN Chicago (remaining at 23% and 20% of TV households, respectively), a three percentage point increase in Philadelphia (53% to 56% of TV households), a four percentage point increase in

1. Enterprises's Advertising Revenues Have Been Impaired as a Result of Comcast's Exclusionary Conduct

71. In addition to the incremental promotional expenses identified above, NFL Network incurs additional costs due to Comcast's exclusionary conduct in the form of lost advertising revenues that it would have earned absent the exclusion. Because the number of potential viewers increases with a network's subscribers, by reducing the number of Comcast's subscribers that receive NFL Network, Comcast's placement of NFL Network on a poorly distributed tier reduced NFL Network's potential viewers, and as result, decreased NFL Network's advertising revenues.

2. Enterprises's Licensing Revenues Are Reduced as a Result of Comcast's Exclusionary Conduct

72. By reducing the number of paid NFL Network subscribers, Comcast's conduct also reduced the total license revenues that NFL Network would have earned. As of May 2008, NFL Network had only 36 million subscribers.[72] This is a fraction of the 73 million subscribers who receive the Golf Channel or the 66 million subscribers who receive Versus, both of which are carried on Comcast's Expanded Basic tier.[73] Following Comcast's decision to move NFL Network to its premium sports tier, the number of Comcast customers who received NFL Network fell from 8.6 million to 1.4 million.[74] Like advertising rates, the reduction in monthly licensing revenues for NFL Network can be calculated as the difference between

in licensing revenues when NFL Network was carried on the *D2 tier* (equal to the

---

the Southeast (16% to 20% of TV households), and an eight percentage point increase in the Mid-Atlantic (30% to 38% of TV households).").

72. *Hawkins Declaration, supra*, ¶ 2 ("According to the League's most recent statistics, the NFL Network is currently delivered to approximately 36 million homes nationwide.").

73. COMCAST CORP. 2008 ANNUAL REPORT (SEC FORM 10-K), Feb. 20, 2009, at 7 [hereinafter *Comcast 2008 10-K*].

74. *Hawkins Declaration, supra*, ¶ 18 ("Although the NFL Network was originally available to about 8.6 million subscribers on the digital basic tier, it became available to only 1.4 million Comcast household subscribers to the premium sports tier after the drop.").

product of per subscriber per month on the D2 tier and 8.6 million D2 subscribers)[75] and in revenues when NFL Network is carried on the *premium sports tier* (equal to the product of per subscriber on the premium sports tier and 1.4 million premium sports tier subscribers),[76] or nearly dollars per month.

3. Reduced Ability to Compete for Sports Programming

73. NFL Network competes against Comcast and other programmers for sports programming. For example, NFL Network was recently not considered for a package of games offered for sublicense by Fox Sports Net (FSN) on behalf of the Pac-10 college football conference.[77] The low number of cable subscribers who receive NFL Network was a factor that disqualified NFL Network from consideration.[78] Instead, in June 2007—just as Comcast was beginning to move NFL Network to the premium sports tier—FSN sublicensed the games to Versus, which had 64 million subscribers at the time.[79] This example confirms that NFL Network is impaired in its ability to compete effectively for sports programming as a result of Comcast's discriminatory conduct. Not only does this impairment harm NFL Network, Comcast's exclusionary conduct redounds to the harm of non-NFL content owners, who enjoy less vigorous competition among rival programmers for the rights to their content. In an industry with a limited number of competent bidders, a more robust bidder would enable the Pac-10 and other conferences to enjoy higher prices for their content.

---

75. *See* Table 14, *infra*.
76.

77. *Hawkins Declaration, supra*, at ¶ 20.
78. *Id.*
79. John Consoli, *FSN, Versus Ink College Football Game Deal*, MEDIAWEEK, June 6, 2007.

G. The Resulting Harm to Viewers and Advertisers

74. As explained above, Comcast's exclusion of NFL Network from widely penetrated tiers resulted in harm to viewers and advertisers because NFL Network was deprived of economies of scale and denied access to the most efficient distribution channel for its programming (and the associated sale of advertising). In this section, I identify the specific ways in which this consumer harm manifests itself, beginning with a description of the harm to viewers.

1. Harm to Viewers

75. Comcast's refusal to carry NFL Network on a broadly penetrated tier causes harm to consumers in several ways, including (1) increased expenditures for consumers who choose to subscribe to NFL Network, (2) higher expenditures to watch rival sports programming (including that owned by Comcast), and (3) a decrease in the option value associated with being able to watch previously undiscovered programming.

a. Higher Expenditures to Watch NFL Network

76. Moving NFL Network to a premium tier harmed any Comcast subscriber interested in receiving NFL Network. The viewers most harmed were those who value NFL Network, but only at a price less than the Comcast-determined price necessary to subscribe to the premium tier content. Those viewers decided not to purchase NFL Network and lost the entirety of the enjoyment that they would have received from viewing this content.

77. The second group of consumers harmed are those who purchase NFL Network on the premium tier. Although they still receive some surplus from consuming NFL Network, it is less than the surplus they would experience if NFL Network were carried on the Expanded Basic tier. Most of the reduction in this group's surplus is transferred to Comcast in the form of revenues from premium tier subscriptions.

b. Higher Expenditures to Watch Rival Sports Programming

78. Consumers are further harmed due to higher expenditures for rival sports programming. By weakening NFL Network's ability to compete for inputs (for example, college football programming) and advertisers, Comcast has ensured that rival sports programming networks, including those owned by Comcast, have increased market power vis-à-vis MVPDs and an increased ability to raise subscription prices. NFL Network constrains the market power of these rival programmers, and without its price-disciplining effect, rival networks can increase the prices they charge to MVPDs.

c. Decreased Advertising Revenues Implies Higher Subscription Fees in a Two-Sided Platform

79. NFL Network connects two groups of consumers: advertisers and viewers. For this reason, NFL Network creates what economists refer to as a two-sided market.[80] NFL Network could, if it chose, restrict the number of subscribers to its content by charging a high subscription price for its programming. In this manner, NFL Network would operate in a manner similar to premium cable channels such as HBO or Cinemax. NFL Network is different from these other content providers, however, in that NFL Network generates a significant portion of its revenues from advertising.[81] Furthermore, advertisers pay a premium for the ability to reach all, or very close to all, media markets in the United States. For this reason, NFL Network prefers to charge a lower price to subscribers so that it can profit from the network effect created

---

80. *See* Jean Charles Rochet & Jean Tirole, *Platform Competition in Two-Sided Markets*, 1 J. EURO. ECON. ASS'N. 990 (2003) [hereinafter *Platform Competition*]; Wilko Bolt & Alexander F. Tieman, Social Welfare and Cost Recovery in Two-Sided Markets, IMF Working Paper WP/05/194 (2005); Howard Chang, David S. Evans, & Daniel D. Garcia Swartz, *The Effect of Regulatory Intervention in Two-Sided Markets: An Assessment of Interchange-Fee Capping in Australia*, 4 REV. NETWORK ECON. 328 (2005).

81. The likely reason why MVPD subscribers are willing to pay a premium to watch networks like HBO and Showtime is the *absence* of commercials. Because sports programming networks offer programming that is, by necessity, interrupted by timeouts, their programming is not as conducive to carriage on the premium tier.